

## CLAIMS

We claim:

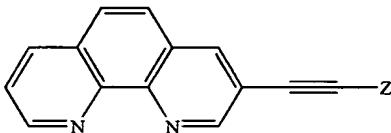
*Sub B*

1. A method for making acetylene derivatives of phenanthrolines comprising reacting a 3,8 brominated phenanthroline with an aromatic acetylene.

5 2. The method of claim 1 wherein said 3,8 brominated phenanthroline further comprises a transition metal atom.

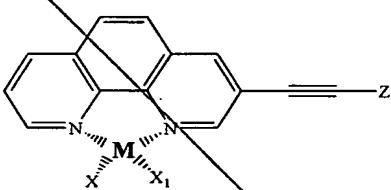
3. The method of claim 1 wherein said 3,8 brominated phenanthroline further comprises a chelated transition metal atom.

10 4. A compound having the formula comprising:



wherein Z is alkyl, substituted alkyl, aromatic or substituted aromatic group.

5. A compound according to claim 5 having the formula comprising

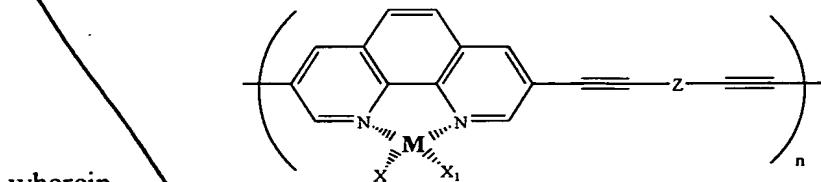


wherein

M is a transition metal ion; and

X and X<sub>1</sub> are co-ligands.

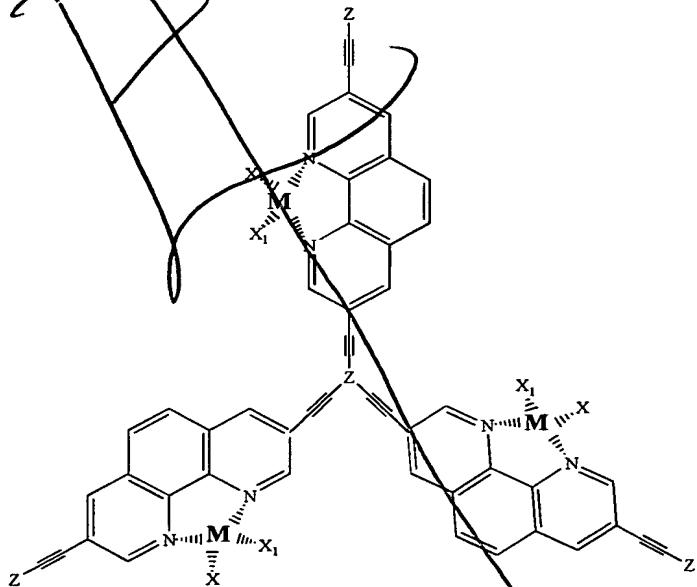
6. A compound according to claim 4 which is a polymer having the formula:



M is a transition metal ion and

X and X<sub>1</sub> are co-ligands.

5 7. A compound according to claim 6 having the formula:



8. A compound according to claim 4 wherein Z comprises the base of a nucleoside.

9. A compound according to claim 4 wherein Z comprises the base of a nucleotide.

10. A compound according to claim 4 wherein Z comprises the phosphoramidite form of the nucleotide.

Sub B<sup>27</sup> 10

add 02

add B57

add E2

add f3